

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the previous amendments and the following remarks.

The amendments to the specification correct minor typographical errors.

Before turning to the claims, a brief discussion of the tube clamp device at issue here is provided. As illustrated in Fig. 2, a clamp 7 includes a movable jaw portion 60 including a hook section 310, and a fixed jaw portion 80 including a roller 30. The hook section 310 includes a hook portion B 312 sandwiched between hook portions A 311 and C 313, and is configured to latch with the roller 30. The hook portion B 312 is made of an elastic material and includes a protruded portion 314 at one side which protrudes relative to the other hook portions such that the hook portion B 312 bends during engagement of the hook section 310 to the roller 30, as illustrated in Figs. 14A through 14C. The other side of the hook portion B 312 is fixed to the hook section 312 via a screw 315.

Turning to the claims, Claim 1 is rejected as being unpatentable over U.S. Patent No. 4,619,642, hereinafter Spencer, in view of the 1993 article titled Fascinating Fasteners in the Appliance Manufacturer periodical, hereinafter Babyak.

Claim 1 as originally filed recites a tube clamp apparatus including, *inter alia*, a placement clamp section, a movable clamp section, and a hook section which is set up at the movable clamp section. The hook section engages the placement clamp section to maintain a pressing state of the movable clamp section, and has a plurality of divided hook portions. At least one of the hook portions has a protruded portion which protrudes toward one side thereof than other hook portions and is

made of an elastic member which maintains engagement with the placement clamp section.

Spencer discloses a cold cut connection apparatus including a pivoting cam surface 185d which engages a roller 183d.

In taking the position that the cam surface 185d corresponds to a hook section, the Official Action correctly notes that Spencer does not disclose the cam surface 185d having a plurality of divided hook portions, with at least one protrusion to the side of the other hooks being made of an elastic member. The Official Action goes on to take the position that Babyak cures the above-noted deficiencies of Spencer.

The portion of Babyak relied upon in the Official Action discusses a type of sandwich mount having the trade name ISOLOSS. For ease of understanding, the following discussion refers to the attached web page which includes a depiction of the ISOLOSS mount.

As discussed and illustrated in the attached web page, the ISOLOSS mount comprises a urethane elastomer bonded between two metal screws. The urethane mount can thus be sandwiched between two components so as to fasten those components together while providing shock absorption therebetween.

The Official Action states that "it would have been obvious... to make the hooks of Spencer of urethane elastomer sandwiched between two metal hooks... as such is a known method of forming a fastener to provide shock protection, vibration isolation and noise control." The Official Action's reasoning appears to be that Babyak renders obvious dividing Spencer's cam surface 185d into a two-piece cam

surface, and then providing a shock absorber therebetween having the same shape as the two pieces of the cam surface.

This proposed modification places a urethane mount between two pieces of a cam surface, with the two cam surface pieces both attached to the rest of the device in exactly the same way disclosed in Spencer. Thus, the shock protection, vibration isolation and noise control provided by such an arrangement, if any, would only be relative to the cam surface pieces themselves. However, Spencer's cam surface was unitary before the proposed modification. In other words, concerns about shock absorption, vibration isolation and noise control are not relevant in the context of Spencer's one piece cam surface. Indeed, the problem supposedly solved by the proposed modification exists, if at all, only as a result of the proposed modification in the first place. Accordingly, it would not have been obvious to an ordinarily skilled artisan to have modified Spencer's cam surface in this way.

Moreover, the Official Action does not explain how this alleged combination would have resulted in a protruded portion which protrudes in a manner similar to that recited in original Claim 1. The Official Action has thus failed to make even a *prima facie* showing of obviousness of all of the features recited in original Claim 1.

Even assuming *arguendo* that the alleged combination would have been obvious, Claim 1 is further distinguishable in view of the present amendment.

Specifically, amended Claim 1 recites that the hook section has a plurality of divided hook portions in a direction orthogonal to a longitudinal direction of the tube placed at the placement clamp section, and that at least one of the hook portions is made of an elastic member which maintains engagement with the placement clamp

section, the elastic member having a protruded portion at one side which protrudes relative to other hook portions and having an other side fixed to the hook section.

Applicants respectfully submit that the alleged combination would not have resulted in a hook section having a plurality of hook portions, with at least one of the hook portions made of an elastic member having a protruded portion at one side which protrudes relative to other hook portions and having an other side fixed to the hook section.

Claim 1 is therefore allowable over Spencer in view of Babyak, and withdrawal of the rejection of Claim 1 is respectfully requested.

Claim 8, the only other independent claim, is also rejected as being unpatentable over Spencer in view of Babyak.

Amended Claim 8 recites a tube connecting apparatus including, *inter alia*, a holding unit having a placement clamp section, a movable clamp section, and a hook section which is set up at the movable clamp section. The hook section engages the placement clamp section to maintain a pressing state of the movable clamp section. The holding unit has a plurality of divided hook portions at the hook section in a direction orthogonal to a longitudinal direction of a tube placed at the placement clamp section. At least one of the hook portions is made of an elastic member which maintains engagement with the placement clamp section. The elastic member has a protruded portion at one side which protrudes relative to other hook portions and an other side fixed to the hook section.

Amended Claim 8 is allowable over Spencer in view of Babyak for reasons consistent with the above discussion of Claim 1. Withdrawal of the rejection of Claim 8 is therefore also respectfully requested.

The dependent claims are allowable at least by virtue of their dependence from allowable independent claims. Thus, a detailed discussion of the additional distinguishing features recited in the dependent claims is not set forth at this time.

Early and favorable action with respect to this application is respectfully requested.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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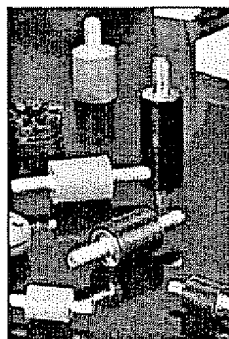
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ISOLOSS® sandwich mounts E-A-R'S ISOLOSS® SANDWICH MOUNTS PROTECT AGAINST SHOCK AND VIBRATION

E-A-R Specialty Composites offers a line of standard ISOLOSS® urethane elastomer sandwich mounts that provide high performance shock protection, vibration isolation and noise control in a wide range of OEM equipment applications. Featuring cure-bonded metal fasteners that limit the need for additional assembly hardware, E-A-R's ISOLOSS sandwich mounts are available in 20 standard configurations, in diameters from .28-inch to 1-inch, for maximum loads from one-half pound to 50 pounds per isolator.



[ENLARGE IMAGE](#)

In fastening applications, ISOLOSS sandwich mounts provide a highly damped isolation system that requires a minimum of sway space to deliver a desired level of shock protection. Unlike mounting systems incorporating materials such as neoprene or natural rubber, ISOLOSS sandwich mounts effectively absorb mechanical energy, limit deflections and stresses, and dissipate the energy as low-grade heat.

E-A-R offers its sandwich mounts in two proprietary, ISOLOSS specialty urethane formulations—ISOLOSS HD and ISOLOSS VL—that combine high damping performance and mechanical strength with excellent environmental resistance properties and a wide service temperature range. Common applications for the new ISOLOSS sandwich mounts include noise control and vibration isolation for pumps, compressors, fans and disk drives.

For more information, visit [ISOLOSS HD and VL urethanes](#).

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